8. Create a Student class to demonstrate constructor overloading by allowing the creation of student objects using different initialization formats . The program should include Student Class Fields like rollNumber, name, department.

Code

```
class Student {
    int rollNumber;
    String name;
    String department;

    // Default constructor
    Student() {
        rollNumber = 0;
        name = "Not Assigned";
        department = "Not Assigned";
    }

    // Constructor with roll number and name
    Student(int r, String n) {
        rollNumber = r;
        name = n;
        department = "Not Assigned";
    }
```

```
    // Constructor with all details
    Student(int r, String n, String d) {
        rollNumber = r;
        name = n;
        department = d;
    }

    // Display method
    void display() {
        System.out.println("Roll Number: " + rollNumber);
        System.out.println("Name: " + name);
        System.out.println("Department: " + department);
        System.out.println();
    }
}

public class ConstructorDemo {
    public static void main(String[] args) {

        Student s1 = new Student();
        Student s2 = new Student(101, "Ali");
        Student s3 = new Student(102, "Ahmed",
"Computer");

        System.out.println("Student 1 Details:");
```

```
        s1.display();

        System.out.println("Student 2 Details:");
        s2.display();

        System.out.println("Student 3 Details:");
        s3.display();
    }
}
```